

### **REMARKS/ARGUMENTS**

This Amendment accompanies a Request for Continued Examination and is responsive to the issues presented in the Official Action of August 24, 2007, a Final Rejection, as well as the examiner's comments in an Advisory Action of January 16, 2008. The Advisory Action does not indicate, one way or the other, if the Amendment of December 13, 2007 was or was not entered and because of this instructions are given with the Request for Continued Examination that this Amendment be entered and considered on the merits.

This application was also the subject of discussions between Examiner Lu and the undersigned on August 12, 2008. During those discussions the examiner acknowledged that the amendments proposed to claims 11-13 would respond to and resolve the claim objections in item 2 and the claim rejections under 35 USC §112, second paragraph, given on pages 2-3 of the Final Rejection.

Reconsideration of this application is requested. Claims 11-20 will again be pending in the application.

Currently claims 13, 14 and 17 are withdrawn from consideration but are the subject of observations in the Official Action of August 24, 2007 and now by applicants as well. In particular, applicants do not feel that the withdrawal of claim 17 from consideration is justified in that an aminophosphonium salt does not dissolve in an aprotic solvent and the reaction cannot be carried out for the HA adducts of the ligands. Reconsideration and reinstatement of claim 17 is again requested.

The claims have been amended responsive to the examiner's comments in items 2-3 of the Official Action. The "alkylammonium hydroxide" and "ammonium salt" has been deleted from claim 13.

Applicants and counsel have carefully studied the examiner's comments regarding claims 11 and 12. Claim 11 has been suitably amended and claim 12 adjusted, where appropriate, to comply with traditional *Markush* terminology. There appears to be some confusion as to the wording and/or formatting of claim 12. In claim 12 the Y group is selected from either (i) or (ii). The other formulas refer to the substituents R<sup>1j</sup>. Claim 12 as amended above includes the appropriate terminology and also formatting to emphasize these features and it is believed to be fully compliant with 35 USC §112, second paragraph. The balance of the Official Action relates

to a continuing rejection of alleged "obviousness" over U.S. 6,355,744 as well as two other documents as discussed in the previous Official Action. Applicants now address the comments in item 5 of the Official Action.

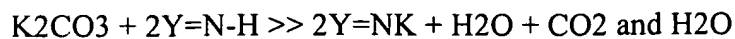
First, applicants note the examiner's comments that the metal-organic reagent of formula 2 is not limited to  $\text{CpTiCl}_3$ .

Formula 2 is indeed not limited to  $\text{CpTiCl}_3$ , but does not include metallocenes such as  $\text{CpTiBu}_3$ . Claim 11 is limited to a metal-organic reagent according to formula 2 where at least one group 17-halogen atom is present (X). There was no reason to expect that this halogen atom could be replaced by an imine ligand in a one step reaction, as this type of reaction cannot be carried out for the Cp-containing ligands of e.g. the DOW and Exxon catalyst. This has been demonstrated in the attachment of the Amendment of June 20, 2007.

The second comment of the Examiner appears to be based on the misunderstanding that BuLi does not work. In the June 20, 2007 Amendment it was stated that from Haken it cannot be derived that  $\text{CpTiCl}_3$  in the presence of strong bases like BuLi is not transformed into unstable butylated Ti(IV) complexes like  $\text{CpTiBuCl}_2$ ,  $\text{CpTiBu}_2\text{Cl}$  or  $\text{CpTiBu}_3$ , from which it is known in the art that they decompose to inactive low valency Ti compounds. Applicants point out that the reaction with the imine is obviously (but surprisingly) so much faster, that the above-mentioned decomposition does not occur. The invention is therefore enabled.

As to the third comment the experiments included in the attachment to the Amendment of June 20, 2007 are analogous to the reaction among  $\text{CpTiCl}_3$ , BuLi and imine ligand, contrary to observations in the Final Rejection. Based on the fact that the bis-Cp and bis-biphenyl containing ligands of the catalysts described by DOW and Exxon have similar pKa values (~15) as the phosphinimines or ketimines, one skilled in this art would have expected that reactions that cannot be carried out with bis-Cp and bis-biphenyl containing ligands could not be carried out with phosphinimines or ketimines.

As to the fourth comment, although  $\text{K}_2\text{CO}_3$  has not yet been examined due to the restriction requirement, applicants also point out swapping an inorganic base like  $\text{K}_2\text{CO}_3$  for an organic base is not obvious due to the surprising effect that the following reaction, expected by a person skilled in the art, obviously does not occur:



would destroy the metal-organic species. The fact that this does not occur is surprising for a person skilled in the art.

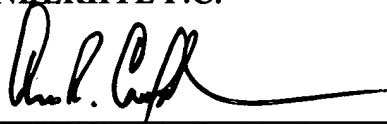
By the filing of this Request for Continued Examination applicants intend to pursue the opportunity of further discussions with the examiner to investigate and identify allowable subject matter.

For the above reasons it is respectfully submitted that the claims as above amended define inventive subject matter and are ready for allowance. Should the examiner have any questions or require further information, please contact the undersigned.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



Arthur R. Crawford  
Reg. No. 25,327

ARC:eaw  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100